

REMARKS

Claims 1-14, 16-30, 32-45, 47 and 48 have been rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/41917 in view of LUNDGREN or PARKER. Claims 1-14, 16-30, 32-45, 47 and 48-57 were submitted in the Amendment filed on 12 March 2003. New claims 49-57 were added in the prior Amendment. It is assumed for purposes of this response that all of the claims submitted, including claims 48-57, have been rejected as provided above. In any case, Applicants respectfully traverse the above rejection for the reasons set forth below.

Claims 1-14, 16-30, 32-45, 47 and 48-57 have been amended to provide that the magnesium compound employed in the process of the claimed invention is selected from the group consisting essentially of magnesium hydroxide. Also, claims 13, 29 and 44 have been amended to provide that the bleached wood pulp has an ISO brightness of more than about 65 %.

WO 96/41917 relates to the use of MgO as the sole alkaline source in a pulp bleaching process. The pending claims relate to a magnesium compound which is selected from the group consisting essentially of magnesium hydroxide. WO 96/41917 discloses a maximum target ISO Brightness of 65. Claims 13, 29 and 44, on the other hand, are directed to an ISO brightness of more than about 65 %. WO 96/41917 relates to the use of MgO as solid particles of varying size. Contrarily, in new claims 58-60, the magnesium compound is a magnesium hydroxide slurry. For these reasons, WO 96/41917 does not teach or suggest the claimed invention.

LUNDGREN teaches bleaching of chemical pulp that has been substantially delignified. The claims of the present invention relate to the bleaching of mechanical pulp. LUNDGREN does not mention the use of Mg(OH)₂. Also, the LUNDGREN two-step treatment process (i.e. chelating and peroxide stages) follows an oxygen stage which is employed for purposes of delignifying the pulp. More specifically, LUNDGREN describes an oxygen bleaching stage followed by a C/D E D E D bleaching sequence. Mechanical pulps do not include C, D, E or O steps in their bleaching sequence. The claimed bleaching process is not meant to delignify pulp

since it is directed to the bleaching of undelignified mechanical pulp. LUNDGREN is non-analogous prior art since it contemplates the bleaching of chemical pulp. Therefore, LUNDGREN does not teach or suggest the claimed invention.

PARKER teaches bleaching with hydrogen peroxide and an organic carboxylic acid anhydride such as acetic anhydride. The claims herein are directed to peroxide bleaching of mechanical pulp using magnesium hydroxide as the alkaline source. PARKER also mentions that silicate and magnesium sulfate can be added as stabilizers. The subject claims do not include the use of either silicate and magnesium sulfate. These compounds are specifically avoided in Applicants' bleaching process. The pH range of PARKER has been set so that acetic anhydride will decompose into acetic acid in water and react with NaOH to form acetic acid and sodium acetate. The presence of an anhydride will chemically lower the pH. The 6.5 to 9 pH preferred range of PARKER has been established to function only in combination with a bleaching agent comprising both a peroxide and an anhydride additive bleaching agent. Therefore, PARKER does not teach or suggest the claimed invention.

Applicants controvert the above rejection based on the above-cited references both individually and in combination. Absent some motivation, incentive, or suggestion in the prior art supporting the modification of a reference, obviousness cannot be established by modifying the reference for purposes of producing the claimed invention. To make an obviousness rejection, the Examiner must be able to point to a teaching in the reference that suggests the modification asserted by the Examiner. Absent such a suggestion, the Examiner has impermissibly used applicant's teachings to examine the prior art for the claimed elements.

In summary, for the reasons set forth above, the applicable cited references, individually or in combination, do not teach or suggest the process set forth in pending claims 1-14, 16-30, 32-45, 47 and 48-57 of the above-captioned invention.

13

Serial No. 09/769,761

Accordingly, this application is now in condition for allowance, and the Examiner is requested to pass this application to issue forthwith. If any matters are later deemed unresolved by the Examiner, he is encouraged to call the Attorney for Applicants to discuss same.

Respectfully submitted,

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